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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/708,132 | 02/09/2004 | Alan J. Krebs | 71189-1584 | 2131 |
| 20915 | 7590 | 10/30/2008 | | |
| MCGARRY BAIR PC 32 Market Ave. SW SUITE 500 GRAND RAPIDS, MI 49503 | | | EXAMINER GRAHAM, GARY K | |
| | | | ART UNIT 3727 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/708,132 | KREBS, ALAN J. | |
| | Examiner | Art Unit | |
| | Gary K. Graham | 3727 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-12, 14-21 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-19, 26 and 33 is/are allowed.
- 6) ☒ Claim(s) 6-12, 20, 21, 25, 27, 32 and 34 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 28-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-12, 20, 21, 25, 27, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloan (US patent 4,971,471).

The patent to Sloan discloses the invention substantially as is claimed (fig.3). Sloan discloses a floor cleaner comprising a cleaning head (16) removably and pivotally attached to an upright handle (54) via joint (58), a cleaning implement (40 or 46) associated with the cleaning head and a “self-contained”, resilient thermal storage body (18 or 36) removably associated with the cleaning head and adjacent the cleaning implement. Cleaning fluid or wax passes into the body (18 or 36) and then through the cleaning implement (40 or 46). Thus thermal energy that passes into the body (18 or 36) will be released to the cleaning implement. As such, the body (18 or 36) is considered to be adapted to store thermal energy and to release the stored thermal energy over time, as is claimed, in an exothermic process. In other words, if heated fluid is passed into the body (18 or 36), the thermal energy associated therewith will be released to the body and ultimately to the cleaning implement (exothermic process) as is claimed, nothing would prevent such. Therefore, the body is adapted to store and release the energy as far as is claimed.

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The patent to Sloan discloses all of the above recited subject matter with the exception of using a heated fluid and the fluid comprising gel.

While Sloan does not discuss heated fluid, it is well known to heat both cleaning fluids and wax for cleaning of floors. Heated fluid provides increase cleaning action and it would have been obvious to one of skill in the art to heat the cleaning fluid or wax of Sloan, as is well known, to enhance cleaning action thereby.

With respect to claims 25 and 27, the body identified in Sloan is considered as “self-contained”, at least as far as such defines any particular structure. In other words, the body (18,36) is by itself adapted to store thermal energy and to release stored thermal energy over an extended period of time. Note that even after the valve (64) is shut off and fluid does not flow through the body, any remaining heated fluid in the body will transfer heat to the body and ultimately to the cleaning implement. At least at this point, the Sloan body appears to meet applicant’s definition of a self-contained thermal storage body associated with the head.

With respect to claim 9, the body (18,36) can be placed in a heating device when such is removed from the handle. Nothing would prevent such.

With respect to claim 12, note that the cleaning fluid passing through the body (18) is microwave active and the body is encapsulated by pad (36).

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While Sloan discloses that liquid cleaning substance can be used which would pass through the thermal body (36), to employ a gel cleaning substance does not appear inventive. Cleaning substances in both liquid form and gel form are well known. As such, it would have been obvious to one of skill in the art to employ a gel cleaning substance instead of a liquid cleaning substance for that of Sloan, as a mere art recognized equivalent cleaning substance form, lacking any criticality of the cleaning substance form. In other words, employing a gel instead of a liquid does not appear of patentable significance.

Allowable Subject Matter

Claims 14-19, 26, 33 are allowed.

Claims 3-5 and 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 07 July 2008 have been fully considered but they are not persuasive, at least with respect to the rejection of claims by Sloan.

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Applicant's arguments with respect to the Sloan rejection are noted but not persuasive.

Applicant argues that the body of Sloan is not self contained in that it does not contain in itself all that is necessary to store and release thermal energy over an extended period of time. However, such does not appear accurate. Once heated fluid has entered the body (18,36) and the flow of fluid has been shut off, it appears the thermal storage body will be "self-contained", at least as far as defined. Such will contain all that is necessary to store thermal energy and to release thermal energy over an extended period of time. Nothing will need to be added at that time to perform the storing and releasing function. At such time, the cleaner may be placed in a heating device to transfer the thermal energy to the thermal storage body as argued by applicant.

Applicant's argument that Sloan is not amenable to heating the fluid because Sloan does not contemplate heating the fluid is noted but not persuasive. Even though Sloan does not contemplate heating the fluid, such does not prohibit heating of the fluid or make such non-obvious. As set forth above, heated fluid provides increase cleaning action and it would have been obvious to one of skill in the art to heat the cleaning fluid or wax of Sloan, as is well known, to enhance cleaning action thereby. Applicant's argument that it would not have been obvious to heat the fluid as some of the heat may be transferred to a users back is noted but not persuasive. Such in no way prohibits the use of heated fluid in the Sloan device. Clearly one would control the temperature to avoid user harm. Further, the examiner is not suggesting any particular manner of heating the fluid only that it would be obvious to heat it. Such could be heated after leaving the backpack. Applicant's argument that an in-line heater would not have been obvious since the mop assembly is not configured for connection to a power supply is noted but not persuasive. If an in-line heater were to be employed, a connection could also be employed. What prohibits the provision of a connection to a power supply if an in-line heater is to be employed? However, such is a moot point since no particular

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manner of heating is suggested. The examiner is only suggesting that mere heating of the fluid would be obvious.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K. Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary K Graham/
Primary Examiner, Art Unit 3727

GKG
27 October 2008